



Document Process Data for Injection Moulding



Description **Polyamide 6**

Application Injection Moulding

Structure	Semicrystalline
General Properties	Tenacious when moist (2-3% water), hard, stiff, abrasion resistant. Highly hygroscopic and good antifriction properties.
Barrel Temperature	(+ 15°C to be added for glass fiber reinforced) (- 15°C to decrease for Flame Retardant grades, V0/V2/XA/XG/XF/XM/XB)
	Feed Zone 60 – 90 °C
	Zone 1 230 – 240 °C
	Zone 2 230 – 250 °C
	Zone 3 240 – 250 °C
	Zone 4 240 – 250 °C
	Zone 5 240 – 250 °C
	Nozzle 240 – 250 °C
Melt temperature	240 – 250 °C
Mould temperature	60 –110 °C
Injection pressure	900 – 1600 bar
Post-pressure	Between 40 and 60% of injection pressure, high post-pressure time
Counterpressure	30 – 90 bar
Injection speed	High.
Screw speed	Equal to peripheric speed of 1.0 m/s
Metering	0.5 – 3.5 diameters
Cushion	2 – 8 mm, depends on metering and screw diameter
Drying	4 hours at 80°C. Store the product in sealed and waterproof bags.
Recycle	30% of regrinded material. This percentage decreases for technical and aesthetic parts. Not recommended for Flame Retardant grade.
Shrinkage	0.7–2.0 % unfilled; 0.3-0.8 % reinforced grades
Barrel equipment	Standard screw, non-return valve, free-flow nozzle
Quenching	Not necessary to purge with other materials. Purge with natural product suggested after Flame Retardant processing.

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